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(54) Title: METHODS AND SYSTEM FOR THE IDENTIFICATION AND CHARACTERIZATION OF PEPTIDES AND THEIR FUNCTIONAL RELATIONSHIPS BY USE OF MEASURES OF CORRELATION

(57) Abstract: The invention provides methods and a system implementing these methods for identifying and characterizing peptides and their functional relationships by use of measures of correlation. These methods are based on the interaction of a Correlation Associated Network Module with several Application Modules including a Sequence Network Module, a Differential Network Module, a Marker Panel Network Module and a Surrogate Network Module allowing e.g. the provision of a representative overview of the peptide content of biological samples, the prediction of peptide sequences, the identification of peptides suitable to be used as marker panels and the identification of peptides suitable as surrogates for a known peptide.